

ThePublicHealthGrandRounds-Bioterrorism
CDC/PHTN/UNCSchoolofPublicHealth
QuestionsAnsweredontheAir
June11,1999

ProgramStatistics:

Almost400locations.

- Justunder1500registeredparticipants.
- All50states...theNationalGuard...Canada...
- Estimatedtotalaudiencebetween4000-5000viewers.

1. **FaxfromNewYork-** Tularemia,plague,andbotulismarealldiseaseshatnaturally occurwithinthelU.S.Howwouldwedifferentiateabiotorrisimeventfromanaturally occurringcase? **ResponsebyDr.Lillibridge-** “Itgetsbacktothebasicsinpublic healthpreparedness.Therewillbecertainplanningaspectsathatweneedtodoatthe locallevel,totieinourpublichealthofficers,tohavearobustsurveillanceprogram,and aplanforprocessinglabsamples.Butmostofall,itisknowingwhotonotifyearlyina possibleevent,whichincludesnotifyinglawenforcementofficials,butfirstand foremost,yourlocalpublichealthauthorities.”
2. **FaxfromOregon-** Whatisyourrecommendationconcerningimmunizationfor healthcareworkersforsmallpox,anthrax,andplague? **ResponsebyDr.Koplan-** “We haveexistingimmunizationrecommendationsforhealthcareworkers,anduntilsome furtherrecommendationsaremade,theseremainthedisasesofgreatestrisk.Whetherit ishepatitisBorinfluenzaeveryyear,aswellasotheroutineimmunizations,theseare theimmunizationsthatthehealthcareworkersshouldcontinuetooain.”
3. **FaxfromCalifornia-** Howwouldyouenvisionthatastatehealthdepartmentwould communicateabiotorrisimeventtotheirlocalhealthdepartments?Howwouldthat informationflow? **ResponsebyDr.Tilson-** “Wellthatishavereasyquestionand averytoughone.Attheeasiestleveltheanswerisquickly,clearly,andinawaythathatthe localhealthdepartmentcanusetheinformationtodevelopalocalresponse.Remember thatifaneventhappensinonetowninastate,forexample,itisquitelikellythathatthenews mediawillpickupthateventandwanttoknowwhattherelevanceisfortheir community.Sothereneedstobesomeclearsuggestionsaboutowtorespondinevery community.Thesecondthoughtismorecomplexandtroublesome.Weneedtodoalot betterjobofbeingsurethateveryhealthdepartmentinourcountryhasitsowncomputer capacitysothatitcanhaveonlineinformationavailableandaccesstonational information.Asyounow,therearemanyhealthdepartmentsinthecountrytoday whichstillhaveverylimitedcomputercapacity,usedperhapsforbillingandaccounting purposes;butthisisnottheneedednationaltelecommunicationsaccesstowhichlam referring.”
4. **CallerfromPennsylvania-** Whatarethegeneralguidelinesforhowacomunity shouldbepreparedforabiotorrisimevent? **ResponsebyDr.Lillibridge-** “Oneofthe concernsthatwehaveinthisyear’splanninggrantsgoingouttostates,isaddressingthe

issue of tying in the public health community with the overall disaster response community that is active at the state and local level. I think there are four components of any planning that need to come to the forefront if we are going to have an effective response to a large-scale epidemic. These include planning for the transfer of lab samples, a chain-of-custody, and a mechanism to get those forwarded up through your county to your state system and then ultimately linked into the federal system. The same goes for surveillance and the flow of information. And I think the fourth issue that has been underdeveloped at the local level for health responders has been active participation in disaster drills that include contingencies for epidemics and catastrophic epidemics that might be caused by bioterrorism.”

5. **Caller from Kentucky-** We are situated in a very remote area. Whom should we contact first? **Response by Dr. Lillibridge-** “It is important, like any threat, to notify local law enforcement officials. It is also critical to begin a chain of notification at the local level that brings in the local health authorities, so that a cascade can move up through the state and ultimately back to the federal health sector in a response. This will bring good information and will ensure that the health community is part of the overall discussion, planning, and response. Health issues must be reflected as a response ultimately moves through the recovery process as the community responds.”
6. **Fax from a local health department-** Why should we stop what we are doing to deal with this? Given the current challenges facing local health departments all around the country and infrastructure needs, how do we set priorities? What do we have to stop doing to make this possible? **Response by Dr. Koplan-** “First, as a public health community, whether it be federal or state or local, must deal with this together. And there is no way of knowing which of four communities it is going to be in. It is not necessarily going to be in a large coastal city. It can be in the interior of the country or a medium or small place. Most of the things we need to do for bioterrorism are items that will benefit us in the other things we do in our other public health activities. There are communications skills, the computing capability, and the improved epidemiologic and surveillance capabilities which are things we need on a daily basis, whether it be emerging infections or chronic diseases or injury control. So we are really beefing up our capabilities by using the bioterrorism threat to gain capabilities, skills, equipment, and training that we otherwise would not be able to get and we need for our daily activities.”
2nd Response by Dr. Tilson- “In addition to that, one of the lessons I drew from Indianapolis is that this is an excellent opportunity for you, with very limited additional work, to reach out to community partners who are interested and can help you in bioterrorism responses and other emergency responses.”
7. **Call from veterinarians in Maryland-** How do we look at the veterinary aspect and how are we looking to link the human concerns and veterinary concerns? Also, is there an infrastructure that we are looking to link with? **Response by Dr. Lillibridge-** “We are actively working with our partners in the FDA and the USDA to talk about food and veterinary livestock issues and other issues related to agriculture. Second, through CSTE, groups have been very active in trying to get other issues of surveillance related to veterinary diseases which may also be of great concern to bioterrorism. Those issues are

moving through the planning process. The third tier is that it is becoming increasingly clear at community level that preparedness for these issues may be as important as some of the issues in public health for humans.”

8. **Call from veterinarians in Maryland-** The U.S. is becoming very regionalized in its food production, both in standard agriculture as well as meats and poultry. I think there needs to be an integration with the veterinary planning process because these are potentially high risk targets. How do you envision preparation and protection in that arena? **Response by Dr. Lillibridge-** “First, I totally agree. And I would hate to speak for the other agencies in the planning process, but these groups have active planning processes in terms of epidemiologic response, follow-up teams, and a host of regulatory and legislative issues that they look at and have great concern for. I think from our standpoint as the public health practitioner at the local level, stay tuned, because it is a big issue. As we complete our local planning concepts, I think this concern will finally merge with the federal initiatives that are coming from the top down.”

9. **Call from veterinarians in Maryland-** What lessons have we learned from the anthrax release that occurred in the Soviet Union several years ago and can we extrapolate those and use them in our current planning processes? **Response by Dr. Lillibridge-** “One of the things we learned from the release of anthrax in Sverdlovsk in the early 1970s was that while there was great concern that the therapies and planning all needed to be on site in the first 24 hours, and this seemed like a measure that would be tough to respond to, it became clear that casualties up to seven days still represented a reasonable response time. This gave us more impetus to have good planning, good stockpile plans, and an integrated clinical-public health-EMS plan that could respond to these kind of events. I think that was the biggest take-away message for me.”

10. **Fax from North Carolina-** Are there guidelines to help develop plans for state and local agencies? What would be a good resource to obtain quick identification for a biologic agent? **Response from Dr. Tilson-** “There is not any single best site. The CDC is going to be putting a lot more information on its website as well as other websites will be developing. One of my favorite sources is the History of Medicine book published by the National Academy of Sciences called Chemical and Biological Terrorism: Research and Development to Improve Civilian Medical Response. It gives you some tips about how to organize locally as well as some basic medical and biological information, which I think everyone working in public health ought to know.”

11. **Caller from Kentucky-** The CDC’s program dealing with infectious agents was broadened to include select agents such as peptidotoxins. Since the latter group is not biological and not easily administered or propagated, why were such chemical entities treated in a regulatory manner comparable to infectious sources, and will other compounds, including standard research organic chemicals that are or can be toxic, also be subjected to similar regulations? **Response by Dr. Koplan-** “I think the whole issue about ‘select agents’ is being worked out now. We do not have answers to all these yet. There are regulatory components to this and it is under active discussion both within government and within academia.”

12. **Caller from North Carolina-** My question relates to your comments with regard to storage and handling of vaccines. What is the CDC's plan in regard to potency testing for vaccines which have been stored for many years? **Response by Dr. Lillibridge-** "I cannot comment on the Army's component but the FDA is checking the efficacy of certain vaccines. Our plans in FY99 are to build the therapeutic component of the stockpile and to look at expanding that stockpile."

13. **Fax from the Texas Department of Health-** What steps are being taken within CDC to coordinate bioterrorism efforts with law enforcement agencies (like the FBI)? How do you bridge the health sector and the law enforcement sector? **Response by Dr. Koplan-** "All the discussions we are having currently within CDC, with broader aspects with other health agencies with the department, also include to a very strong degree law and security agencies. They are taking a lead role in many components of this. A meeting does not go by that there is not a mixture of health officials and security people." **2nd Response by Dr. Lillibridge-** "One of the issues that we found over the past six months in dealing with a number of hoaxes is that involvement with the law enforcement community has been critical in dealing with certain components of the overall bioterrorism response. We found good information in terms of lab collaboration, and some of the information on processing and early notification as part of the response has been critical in joining these two communities."

14. **Fax from the State of Massachusetts-** What are the biological agents we should be concerned with? **Response by Dr. Tilson-** "Every agent... because the whole idea of terrorism is that one is confronted with the unknown and the uncertain. Of course, we must study major agents like anthrax and botulism, but beyond that the job of the local public health apparatus is to be prepared for anything. Have a sensitive surveillance system and a high index of suspicion when an individual case comes up. The notion is to find partners, confirm the diagnosis, contain the threat, and then proceed."

15. **Fax from the Maryland Department of Health-** In the area of bioterrorism, what do you see as the major training needs of local health departments? **Response by Dr. Roper-** "Clearly they need to generally be trained in the area of epidemiology and epidemic investigation. Secondly, the whole information infrastructure has training needs attached to it, and working out the detail of tying the information system at the local level to the state and other partners is important." **2nd Response by Dr. Tilson-** "One of the nicest contributions that the team in Indianapolis made was communication skills, particularly media communications and public information and understanding. Public understanding was about what this threat might or might not be and what an individual should do. So I would add media relations and communication to the training."

16. **Call from a public lab in Vermont-** If we have something in the lab (a biologic agent) and we suspect it to be related to bioterrorism, whodowecontact? **Response by Dr. Lillibridge-** "At the local level, if a laboratory has questions about lab safety or a lab issue, I would encourage folks to first move through their local-state public health system

...first at the county level and then at the state level. Most states have a state public health labs system and it seems to be very, very important in a response, particularly if you are going to involve federal people, that those components be engaged before we give advice that may be conflicting or confusing in the middle of an emergency. And the third tier, of course, is federal assistance from agencies such as the CDC or the military, and these would all be acceptable avenues.”

The Public Health Grand Rounds-Bioterrorism

CDC/PHTN/UNC School of Public Health

Questions Answered by Telephone during/after Program (Not Answered on the Air)

June 11, 1999

1. **Call from a director of a hospital (clinical) lab-** You discussed enhancing public health labs for identifying threat agents. However, people who are exposed or infected during the release of an agent will be coming to hospital ERs. How do you envision the lab's or hospital's overall response to a bioterrorism event? **Response-** “Hospital labs will be critical for rapidly making a laboratory diagnosis or confirming a clinical diagnosis that bioterrorism has occurred in a community. All hospital labs will be integrated into a national response laboratory network for bioterrorism at a class-A designation. Training courses are currently being given nationwide for these labs. Please contact the National Laboratory Training Network (NLTN) in your region for more information.”
2. **Fax from a local health department to Dr. Lillibridge-** Who at the local level should I notify if I suspect that an act of bioterrorism has taken place? **Response-** “Immediately contact your state health department to assist you in confirming that an act of bioterrorism has occurred. Who you contact in your locality once a preliminary investigation strongly suggests bioterrorism will depend on the planning activities you have conducted in your locality. Key individuals will be local administrators, emergency responders, law enforcement, clinicians, hospitals, etc. Pre-planning for this eventuality is crucial.”
3. **Fax from a state health department to Dr. Tilson-** You said you had to look up anthrax. Where did you look? **Response-** “Any textbook of medicine or infectious diseases.”
4. **Fax from an emergency medical technician to Drs. Koplan or Lillibridge-** Is this just hype or paranoia? **Response-** “Oklahoma City, the World Trade Towers, and recent shootings have taught us that we are not immune from terrorism on our own soil. These violent tendencies have also been unsuccessfully directed at the use of biological agents as weapons of terror, e.g., 750 ill persons in Oregon from deliberately contaminated food. There will be few excuses if our public health community misses the narrow time window to effectively respond to the deliberate use of biological agents.”
5. **Fax from a school of public health to Dr. Roper-** What do you see as the role of

schools of public health in bioterrorism? **Response-** “Providing a trained workforce for effective public health surveillance and response activities to bioterrorism and becoming centers of excellence to teach these vital skills to other responders in the community.”

6. **Call from the Delaware Emergency Management Agency (DEMA)-** What rapid diagnostic systems are presently available for identifying bacteriological agents?
Response- “Many systems are in development.” Are these available from CDC or commercial sources for use as training tools? **Response-** “No.”
7. **Call from New York State-** Are you aware of the existence of the National Medical Disaster Response System? **Response-** “Yes.” Should bioterrorism response efforts be connected to the NMDRS? **Response-** “The medical aspects of response will be. However, this federal agency will not do the public health work needed in the community or make plans for how to deliver mass care in an emergency in your specific community.”
8. **Call from North Carolina-** Some people think car trails are a bioterrorism attack. How does one separate the reality from the perception? People do not always trust the government. **Response-** “Consistent scientific information is crucial that is well supported by research.”
9. **Call from a county health department in California-** What system exists to deliver massive doses of medicines should a toxin be dispersed in an oxygen or water supply to a large vulnerable population? **Response-** “None. But they are being developed as part of the National Pharmaceutical Stockpile.” And who pays the cost for the medication? **Response-** “The federal government pays for the national stockpile.”
10. **Fax from a medical doctor in Denver, Colorado-** If a bioterrorism event should occur, who is responsible for evaluating the physical environment to determine: 1) the extent of contamination and 2) areas that are safe for workers during the emergency or safe to re-occupy after the immediate event? Also, who will collect these samples and perform the necessary analyses and possible decontamination? **Response-** “The EPA has this responsibility in consultation with other agencies.”
11. **Call from a lab administrator in Maryland-** How will you determine that an outbreak is due to bioterrorism or a natural occurrence? Do you think there is false security in thinking we are going to receive a phone call or a letter alerting us to an attack?
Response- “The report of an attack is tangential to the CDC Bioterrorism program. We are preparing for a covert attack that will need critical epidemiological and laboratory skills to evaluate.”
12. **Fax from the Texas Department of Health-** Will CDC offer any “hands on” training to state/local health departments on how to handle and identify biological agents?
Response- “Yes.” Will local health departments have access to reagents used in rapid identification tests, and if so, how are they obtained? **Response-** “Yes. They will start to become available in the next 8 weeks through the national response network for

bioterrorism.”

13. **Fax from the Texas Department of Health-** Is there an “800” number or other number at CDC available around-the-clock to assist the health departments with consultations/technical assistance when dealing with possible bioterrorist events?
Response- “Yes. 770-488-7100.”
14. **Call from Canton, Ohio-** Recall the Indianapolis incident, when the fire chief had them isolate the area. Is preventing egress there a reasonable thing to do since keeping people inside may be problematic if they haven't been exposed? How would you deal with this? **Response-** “It is situation specific. Generally, controlled egress is appropriate as long as a list of all exposed individuals can be maintained.”
15. **Call from Florida-** What is the role of Infection Control in the hospital in relation to a bioterrorist attack? **Response-** “Vital. They are traditionally the eyes and ears of public health in a hospital setting and may be the first to recognize a suspicious cluster of cases. They also are vital to give accurate information on the contagiousness of diseases.”
16. **Call from a physician in Texas-** Will the Health Alert Network (HAN) be connected to poison control centers? **Response-** “The Health Alert Network is the connection. This connection will be from local and state health departments to those partners they integrate into surveillance activities.”
17. **Call from Alabama-** In a bioterrorism attack, if someone is using an agent with a slow, insidious onset, people may go to a pharmacy for help instead of a doctor. Should a partnership be developed with the pharmacy community so that they can know how to identify these cases? **Response-** “These partnerships are being developed and evaluated.”
18. **Call from the Texas Department of Health-** It seems that the FBI might have bioterrorist information beneficial to state and local health departments. What steps are being taken to insure that the FBI provides timely bioterrorist information to health departments? What security issues regarding this information must be addressed?
Response- “The FBI is developing guidelines to share timely information on potential bioterrorism with local and state health departments. They are committed to mitigating any damage over attempts to capture perpetrators.”
19. **Call from a county health department in VA to Dr. Lillibridge-** What kind of relationship is CDC developing with pharmaceutical companies to bring them into a preparedness plan? **Response-** “CDC is working with pharmaceutical companies to stockpile drugs and make vaccines through contracts.”
20. **Call from the Maryland Department of Health and Mental Hygiene-** What do you see as the major training needs of local health department personnel in the access of bioterrorism awareness, readiness, and response? **Response-** “All are important and need to be tailored to the individual need in a community.”

21. **Call from Minnesota-** There are so many public health, public safety, medical, state, and local organizations involved. Has a hierarchy of command been written at national or state levels? **Response-** “Please see the Federal Response Plan.” One can imagine in a large bioterrorism event in New York or Los Angeles that Marshall Law might be imposed. Who is evaluating the legal and jurisdictional considerations? **Response-** “CDC is working with state and local health departments to evaluate public health laws.”
22. **Call from Raleigh, North Carolina-** Is there a way for a community to assess their risk of being a target for bioterrorism? **Response-** “If not the exact risk, then at least the potential targets and magnitude in conjunction with local law enforcement can be assessed.”
23. **Fax from Department of Health Services in Sacramento, California-** One of the most important aspects in responding to biological terrorism threats is the need for consistent factsheets on the threat organisms. These factsheets are needed both for medical and public health professionals as well as first responders and the public. In California these factsheets have been developed by many different agencies and are often inconsistent. Does CDC plan to make common factsheets available to assist responders and the public understand and respond to these threats? **Response-** “Yes.”
24. **Unknown Source-** Poison control centers offer potential surveillance capabilities. Is there any thought toward partnering with poison centers on the part of CDC? **Response-** “Yes. This is one of the many new partnerships that has to be established and the data evaluated.”
25. **Unknown Source-** What does CDC perceive as the role of the private sector (primary care)? **Response-** “They are the single most important key to recognizing bioterrorism in the community and providing the clinical care to suspect cases.”
26. **Unknown Source-** Do you think a “just in time” Internet based learning network and a well published phone number (e.g., 1-800-anthrax) are viable solutions? **Response-** “These are not a complete solution but a small part of the overall solution that includes prepositioned diagnostics and rapid response abilities.”
27. **Unknown Source-** Have you established educational programs for practicing physicians? **Response-** “These activities are urgently needed.”